Appln No. 10/672,186 Amdt date November 20, 2007 Reply to Office action of September 21, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the Specification.

Listing of Claims:

- 1. (Currently amended) A method of determining the routing of interconnected regions of a routing problem by considering all required connections in parallel <u>independently</u> and attempting to resolve crossing conflicts only when at least some contextual information about a region and the paths that cross in the region has been assembled.
- 2. (Currently amended) [[A]]<u>The</u> method according to claim 1, wherein resolving of crossing conflicts is attempted only when all possible relevant contextual information has been assembled.
- 3. (Currently amended) [[A]]The method according to claim 1, comprising the steps of:
 - (a) defining, for each set of regions to be connected, routing which represents a suitable manner of connecting them, respecting only those crossing conflicts which have been explicitly registered with the set currently being considered;
 - (b) examining connections across shared boundaries;
 - ([[b]]c)collating all such proposed routing and resolving any crossing conflicts in a symmetric manner;
 - ([[c]]d)registering such crossing conflicts with the sets of regions which will be required to respect them on the next pass;
 - ([[d]]e)repeating steps (a) to (c) until a sufficient completion and quality of routing solution is attained; and
 - ([[e]]f) converting the routing into suitable geometric representations of routing paths in a way which takes all desired routing into account symmetrically and simultaneously.

Appln No. 10/672,186 Amdt date November 20, 2007 Reply to Office action of September 21, 2007

- 4. (Currently amended) [[A]]The method according to claim 3, in which the regions are polygons and the shared boundaries are edges.
- 5. (Currently amended) [[A]]<u>The</u> method according to claim 1, wherein the interconnected regions are regions of an electrical circuit.
- 6. (Currently amended) A computer-implemented method of determining the routing of interconnected regions of a routing problem, the interconnected regions being regions of an electrical circuit, by considering all required connections in parallel <u>independently</u> and attempting to resolve conflicts only when at least some contextual information about a region and the paths which cross there has been assembled.